CS 134: Networks

Writing Assignment

Prof. Yaron Singer

Due: Wednesday, April 12, 11:59AM

The writing assignment. For this assignment, you will survey a series of papers on a specific topic. After reading and understanding the proofs and techniques in the paper, you will produce a monograph that gives an overview of the main results, how they relate to one another, and the key technical ideas.

The papers. You will write a survey of the following papers on query incentive networks.

- Query Incentive Networks: https://www.cs.cornell.edu/home/kleinber/focs05-qin.pdf
- On Incentive Behavior in Query Incentive Networks: http://cs.carleton.edu/faculty/dlibenno/papers/qin/qin.pdf
- Finding Red Balloons with Split Contracts: Robustness to Individuals' Selfishness: http://web.media.mit.edu/lorenzoc/STOC_qin.pdf
- Time Critical Social Mobilization http://web.media.mit.edu/cebrian/Science-2011-Pickard-509-12.pdf

Guidelines and suggestions. For each paper, your survey should describe the motivating questions, proposed models or solutions, and descriptions of key proofs such that we are convinced that you have read and understood the paper. It is also highly recommended, but not required, that you

- motivate the reason for studying query incentive networks
- formally define the model and problem
- describe how the various papers relate to one another
- relate theoretical results to practical examples and applications

Your survey paper should be 10-12 pages double-spaced.

Example surveys. For an example of survey papers, see:

- Influence Maximization through Adaptive Seeding: http://www.sigecom.org/exchanges/volume_15/1/SINGER.pdf
- A Brief History of Generative Models for Power Law and Lognormal Distributions: https://www.stat.berkeley.edu/~aldous/Networks/1089229510.pdf